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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/505,238	04/27/2005	Manfred Wiedemer	P04,0300	3690

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EXAMINER	
ZIMMERMAN, JOSHUA D	

ART UNIT	PAPER NUMBER
2854	

DATE MAILED: 11/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

Office Action Summary	Application No.	Applicant(s)	
	10/505,238	WIEDEMER, MANFRED	
	Examiner	Art Unit	
	Joshua D. Zimmerman	2854	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 April 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *29-71* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *29-71* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *19 August 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *08/19/2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claim 43 is objected to because it appears to have a typographical error in line 2.

--comprising the steps of:-- should be

--comprising:--

Appropriate correction is required.

2. Claim 71 is objected to because it appears to have typographical errors in lines 2 and 8.

Line 2, --comprising the steps of:-- should be

--comprising:--

Line 8, --adhers-- should be

--adheres--

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 35, 49 and 63 are rejected because they contain the trademark/trade name SELFOC™. Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218

USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade name is used to identify/describe an optical control element and, accordingly, the identification/description is indefinite.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 29, 31, 42, 43, 45, 56, 57, 59, 70 and 71 are rejected under 35 U.S.C. 102(b) as being anticipated by Frunder et al. (US 5,067,404).

3. Regarding claim 29, Frunder et al. teach "a method to generate a print image on a carrier material (column 2, lines 14-15), comprising the steps of:

covering a surface of a print carrier with a layer of a fountain solution which is one of ink-repelling and ink-attracting (column 2, lines 31-41 and column 3, lines 65-68);

in a structuring process generating ink-attracting regions and ink-repelling regions via structuring of the fountain solution layer on the surface of the print carrier corresponding to a structure of the print image to be printed, and wherein to structure the fountain solution, radiation of a lamp is directed via a control element per image

point onto the fountain solution at the surface of the print carrier dependent on a control signal (column 5, lines 23-41);

applying at the surface ink that adheres to the ink-attracting regions and that is not absorbed by the ink-repelling regions (column 2, lines 39-41)and

transferring the applied ink onto the carrier material column 2, lines 14-19)."

4. Regarding claim 31, Frunder et al. further teach "wherein a PLZT element is used as the control element (column 5, lines 35-38)."

5. Regarding claim 42, Frunder et al. further teach "wherein a wavelength of the radiation of the lamp is adapted to the surface of the print carrier (column 5, lines 24-29)."

6. Regarding claim 43, Frunder et al. disclose "a device to generate a print image on a carrier material (Figure 3), comprising the steps of:

an image generating station in which in a structuring process ink-attracting regions and ink-repelling regions are generated on a surface of a print carrier corresponding to a structure of the print image to be printed (item B);

an ink application station wherein ink that adheres to the ink-attracting regions and that is not absorbed by the ink-repelling regions is applied on the surface (item C);

an ink transfer station wherein the applied ink is transferred onto the carrier material (item D);

the image generating station having a lamp whose radiation is directed via a control element per image point (column 5, lines 23-41); and

toward the surface of the print carrier, the radiation being dependent on a control signal (column 5, lines 23-41)."

7. Regarding claim 45, Frunder et al. further disclose "wherein a PLZT element is used as the control element (column 5, lines 35-38)."

8. Regarding claim 56, Frunder et al. further disclose "wherein a wavelength of the radiation of the lamp is adapted to the surface of the print carrier (column 5, lines 24-29)."

9. Regarding claim 57, Frunder et al. teach "a method to generate a print image on a carrier material (column 2, lines 14-15), comprising the steps of:

covering a surface of a print carrier with a layer of a fountain solution which is one of ink-repelling and ink-attracting (column 2, lines 31-41 and column 3, lines 65-68);

in a structuring process generating ink-attracting regions and ink-repelling regions for the fountain solution layer on the surface of the print carrier corresponding to a structure of the print image to be printed, and wherein radiation of a lamp is directed via a control element per image point toward the surface of the print carrier (column 5, lines 23-41);

applying at the surface ink that adheres to the ink-attracting regions and that is not absorbed by the ink-repelling regions (column 2, lines 39-41);

and transferring the applied ink onto the carrier material (column 2, lines 14-19)."

10. Regarding claim 59, Frunder et al. further teach "wherein a PLZT element is used as the control element (column 5, lines 35-38)."

11. Regarding claim 70, Frunder et al. further teach "wherein a wavelength of the radiation of the lamp is adapted to the surface of the print carrier (column 5, lines 24-29)."

12. Regarding claim 71, Frunder et al. disclose "a device to generate a print image on a carrier material (figure 3), comprising the steps of:

an image generating station in which in a structuring process ink-attracting regions and ink-repelling regions are generated on a surface of a print carrier corresponding to a structure of the print image to be printed (item B);

an ink application station wherein ink that adhers to the ink-attracting regions and that is not absorbed by the ink-repelling regions is applied on the surface (item c);

an ink transfer station wherein the applied ink is transferred onto the carrier material (item D); and

the image generating station having a lamp whose radiation is directed via a control element controlled by a control signal toward the surface of the print carrier (column 5, lines 23-41)."

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

13. Claims 41, 55, and 69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frunder et al. as applied to claims 29, 34, 42, 43, 45, 55, 57, 59, and 70 above, in view of Heinzl et al. (US 6,295,928). Frunder et al. fail to disclose "wherein a wavelength of the radiation radiated by the lamp is adapted to the fountain solution layer." Heinzl et al. disclose a method and device for printing wherein a fountain solution layer is heated and removed by radiation tuned to the fountain solution (column 4, lines 48-58). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Frunder et al. with the method of Heinzl et al. in order to prevent damage to the print carrier.

Claims 30, 32-33, 44, 46-47, 58, and 60-61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frunder et al., as applied to claims 29, 34, 42, 43, 45, 55, 57, 59, and 70 above, in view of Kuroki et al. (EP 0 903 226 A2).

14. Regarding claim 30, Frunder et al. fail to teach "wherein a plurality of control elements are arranged in at least one line as an array and the structuring occurs line-by-line." Kuroki et al. teach an array of PLZT elements (paragraph 101). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the array of Kuroki et al. in order to achieve a better image.

15. With regards to claims 32 and 33, see also paragraph 101.

16. Regarding claim 39, 53 and 67, Frunder et al. teach a method and apparatus using a "cooled carrier that is cooled by at least one of water and gas (column 5, lines 10-21)." Frunder et al. fail to teach the use of "at least one of a DMD array and a PLZT

array." Kuroki et al. teach an array of PLZT elements (paragraph 101). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the array of Kuroki et al. in order to achieve a better image.

17. With regards to claim 40, 54 and 68, Frunder et al. fail to disclose "wherein the lamp is one of a xenon lamp and a halogen lamp." Kuroki et al. teach the use a xenon or halogen lamp (paragraphs 99 and 101). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the xenon or halogen lamps of Kuroki et al. in order to expose the carrier material in a cost-effective manner.

18. Claims 34-35, 48-49 and 62-63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frunder et al. in view of Kuroki et al. (EP 0 903 226 A2) as applied to claims 30, 32-33, 44, 46-47, 58, and 60-61 above, and further in view of Doi (US 5,712,674). Frunder et al. in view of Kuroki et al. fail to disclose "an imaging optic that focuses the radiation passed by the respective PLZT element onto the surface of the print carrier is arranged between the PLZT array and the surface of the printer." Doi discloses an exposure device that uses a SELFOC™ imaging optic (figure 2, item 38 and column 12, lines 66-67) to focus radiation passed through a PLZT array (figure 2, item 36. See also column 24, lines 43-51). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the PLZT array and the imaging element of Doi in the method and apparatus of Frunder et al. in view of Kuroki et al. in order to create a sharper image.

Claims 36-37, 50-51 and 64-65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frunder et al. in view of Kuroki et al. as applied to claims 30, 32-33, 44, 46-47, 58, and 60-61 above, and further in view of Miyagawa (US 6,081,321).

19. With regards to claims 36, 50, and 64, Frunder et al. in view of Kuroki fail to disclose "wherein a DMD element is used as the control element." Miyagawa shows that DMD elements are an equivalent structure to PLZT elements, and is known in the art. Therefore, because these two elements were art recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute DMD elements for PLZT elements in order to have a quicker response.

20. With regards to claims 37, 51 and 65, see also paragraph 101 of Kuroki et al.

21. Claims 38, 52 and 66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frunder et al. in view of Kuroki et al., further in view of Miyagawa (US 6,081,321), as applied to claims 36-37, 50-52 and 64-66 above, and further in view of Doi (US 5,712,674). Frunder et al. in view of Kuroki et al., further in view of Miyagawa fail to disclose "an imaging optic that focuses the radiation passed by the respective DMD element onto the surface of the print carrier is arranged between the DMD array and the surface of the printer." Doi discloses an exposure device that uses a SELFOC™ imaging optic (figure 2, item 38 and column 12, lines 66-67) to focus radiation passed through an optical array (figure 2, item 36). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the imaging array and the imaging element of Doi in the method and apparatus of Frunder et al. in view of Kuroki

et al., further in view of Miyagawa and further in view of Doi in order to create a sharper image.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua D. Zimmerman whose telephone number is 571-272-2749. The examiner can normally be reached on M-F 8:30AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Gray can be reached on 571-272-2119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

jdz

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PRIMARY EXAMINER